

## CLAIMS

1. A method for generating a congestion indicator, comprising:
  - 2 determining an outerloop threshold as a function of a desired threshold,  
measuring a congestion metric;
  - 4 comparing the congestion metric to the desired threshold; and  
updating the outer loop threshold in response to comparing the  
measured congestion metric to the desired threshold.
2. The method as in claim 1, wherein the congestion metric is a Rise-Over-  
Thermal measurement.
3. The method as in claim 1, further comprising:
  - 2 Comparing the congestion metric to the outerloop threshold; and  
transmitting a congestion indicator in response to comparing the  
4 congestion metric to the outerloop threshold.
4. The method as in claim 1, wherein updating the outerloop threshold further  
comprises:
  - 2 subtracting a first value  $\Delta$  from the outerloop threshold in response to a  
4 first result of comparing the congestion metric to the desired  
threshold; and  
6 subtracting a second value  $\delta$  from the outerloop threshold in response to  
a second result of comparing the congestion metric to the desired  
8 threshold.
5. The method as in claim 4, wherein a ratio of  $\Delta$  to  $\delta$  corresponds to a  
probability of exceeding the desired threshold of the congestion metric.
6. In a wireless communication system, an apparatus, comprising:
  - 2 congestion metric measurement unit operative measure a congestion  
metric of the wireless system; and

7. The apparatus as in claim 6, further comprising:

8. The apparatus as in claim 6, further comprising:

2 9. The apparatus as in claim 8, wherein the outerloop threshold adjustment unit comprises:

10 wherein a ratio of  $\Delta$  to  $\delta$  corresponds to a probability of exceeding the desired threshold of the congestion metric.

10. The apparatus as in claim 9, wherein the first means is a set of  
2 computer-readable instructions stored on a computer-readable storage  
unit, and the second means is a second set of computer-readable  
4 instructions stored on the computer-readable storage unit.

- 2 11. The apparatus as in claim 9, wherein the outerloop threshold adjustment unit initializes the outerloop threshold to the desired threshold.
- 2 12. The apparatus as in claim 9, wherein the outerloop threshold adjustment unit determines the outerloop threshold having a predetermined margin with respect to the desired threshold.

11/20/2019 10:28:28 AM